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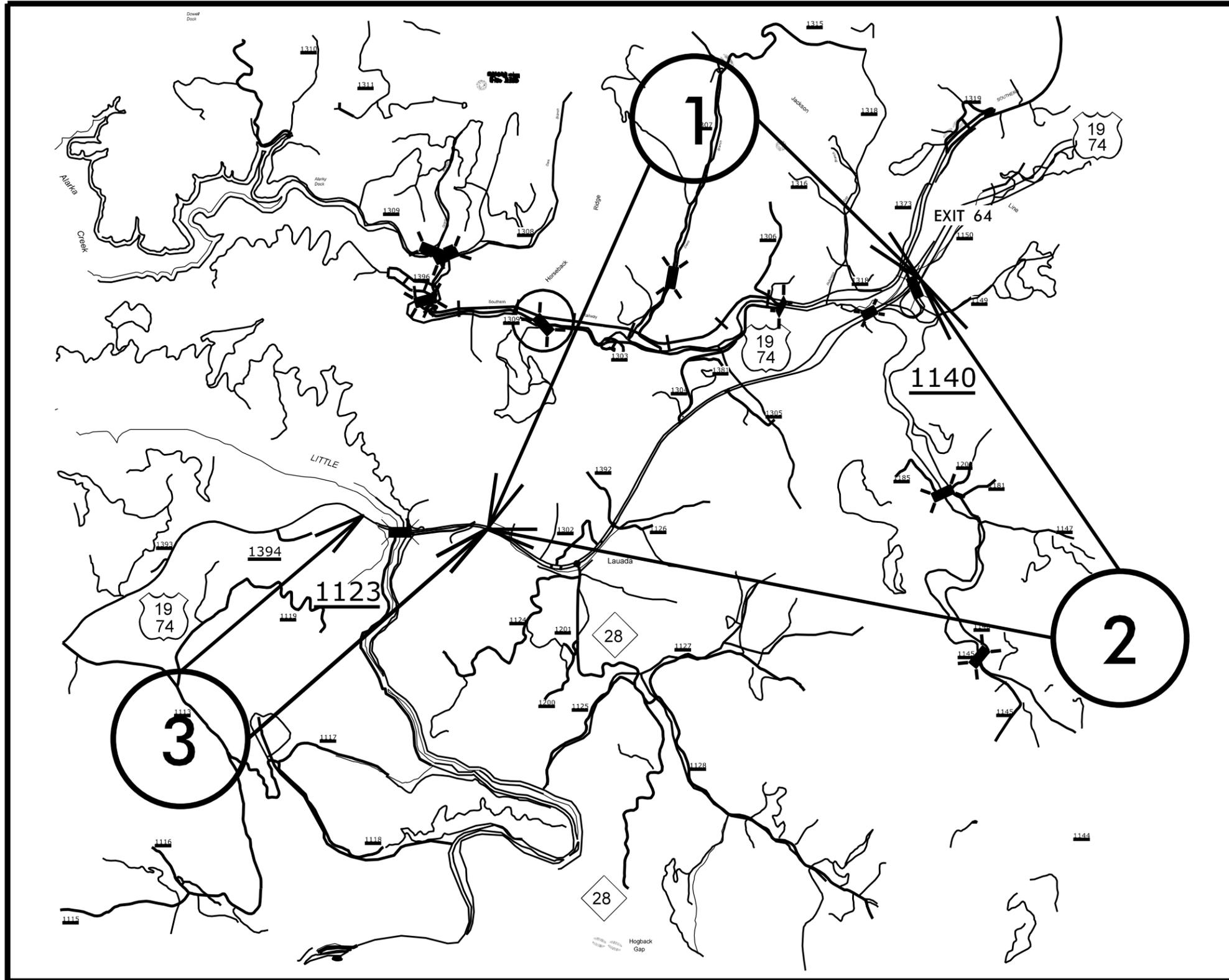
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TIP PROJECT: N/A

CONTRACT: C203771

# SWAIN COUNTY

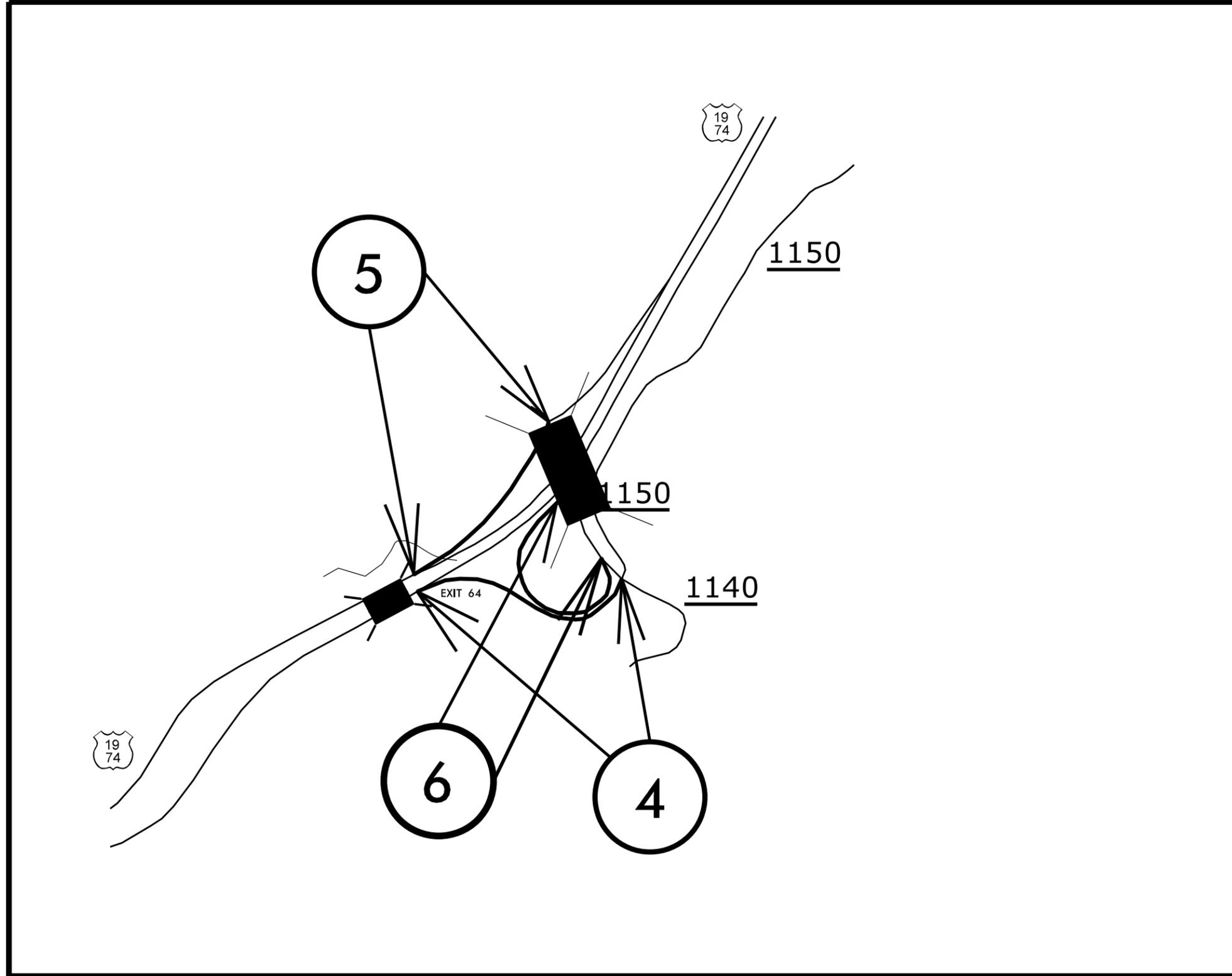
PROJECT REFERENCE NO.	SHEET NO.	
2016CPT.14.02.10871.1	1	
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.02.10871.1		



TIP PROJECT: N/A

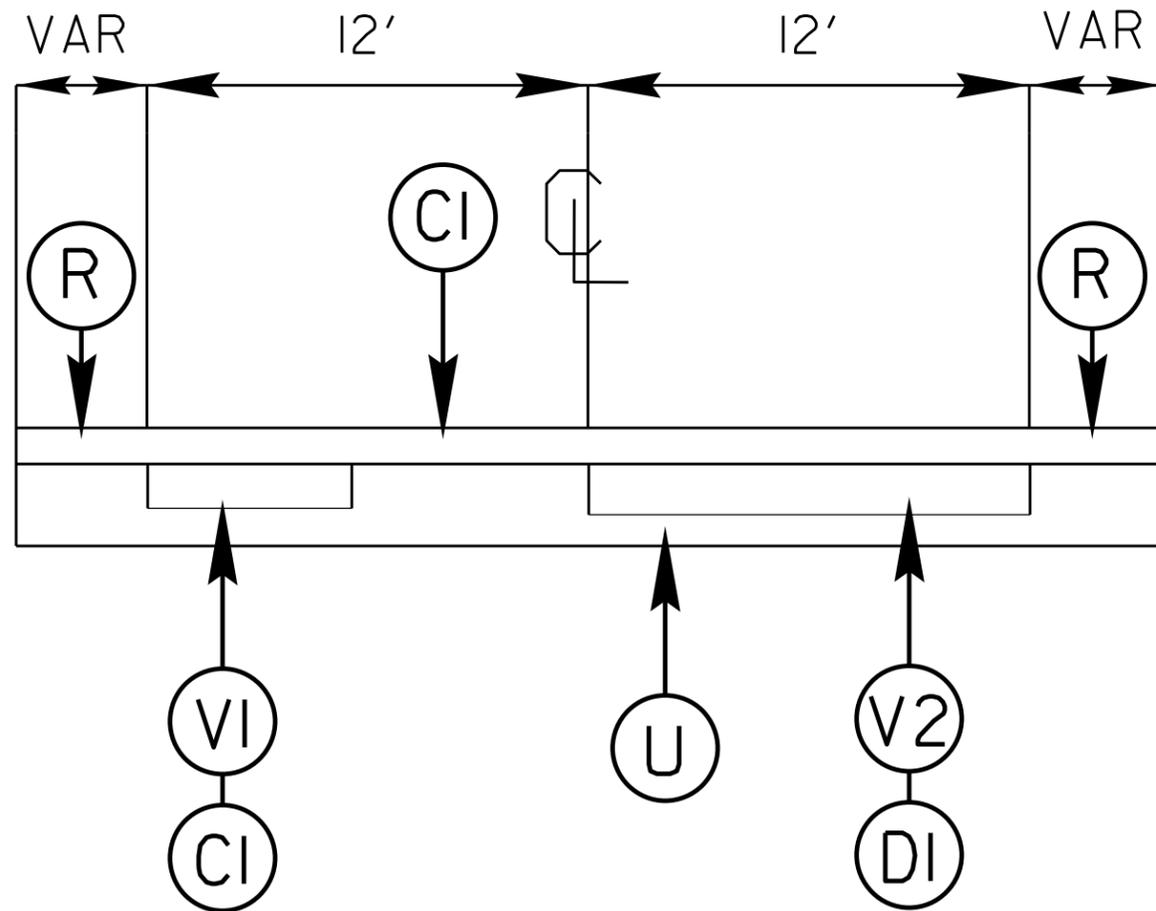
CONTRACT: C203771

PROJECT REFERENCE NO.		SHEET NO.
2016CPT.14.02.10871.1		2
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
2016CPT.14.02.10871.1		



PROJECT REFERENCE NO.		SHEET NO.
14CPT.14.02.10871.1		3
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CPT.14.02.10871.1		

# TYPICAL 1

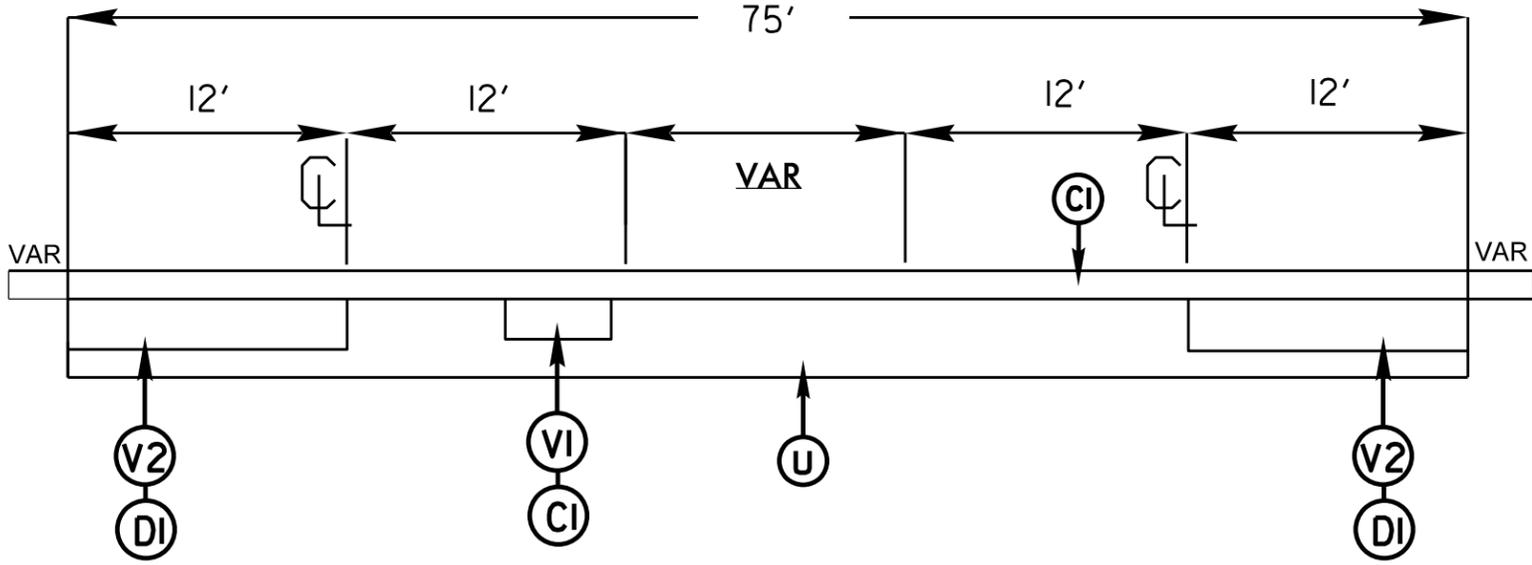


## SURFACING SCHEDULE

ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.OB, AT A AVERAGE RATE OF 342 LBS PER SQ. YD.
R	MILLED RUMBLE STRIPS
U	EXISTING ASPHALT
V1	MILLED ASPHALT PAVEMENT 1 1/2 " IN DEPTH AT LOCATIONS AS DIRECTED BY PROJECT ENGINEER
V2	MILLED ASPHALT PAVEMENT 3" IN DEPTH AT LOCATIONS AS DIRECTED BY PROJECT ENGINEER

PROJECT REFERENCE NO.		SHEET NO.
14CPT.14.02.10871.1		4
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CPT.14.02.10871.1		

# TYPICAL 2

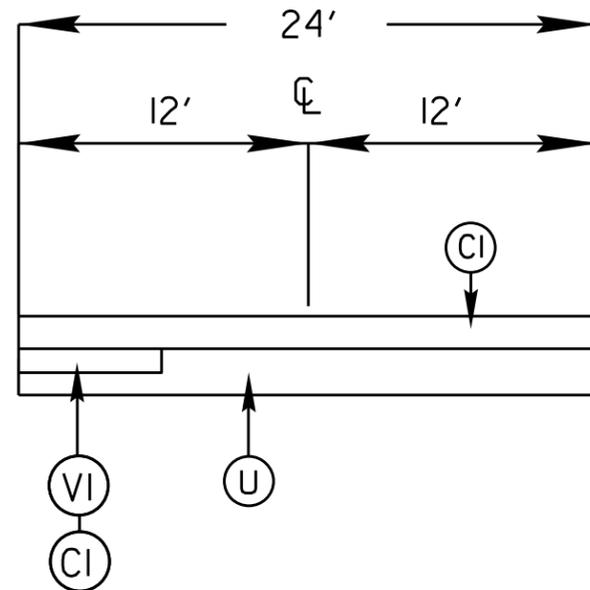


## SURFACING SCHEDULE

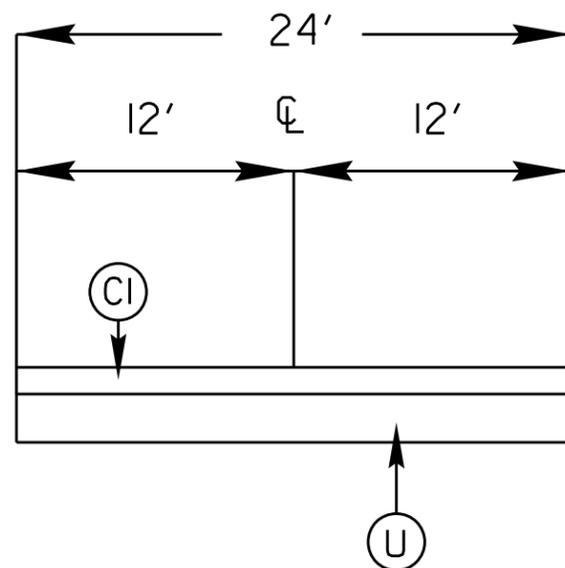
ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.OB, AT A AVERAGE RATE OF 342 LBS PER SQ. YD.
R	MILLED RUMBLE STRIPS
U	EXISTING ASPHALT
V1	MILLED ASPHALT PAVEMENT 1 1/2 " IN DEPTH AT LOCATIONS AS DIRECTED BY PROJECT ENGINEER
V2	MILLED ASPHALT PAVEMENT 3" IN DEPTH AT LOCATIONS AS DIRECTED BY PROJECT ENGINEER

PROJECT REFERENCE NO.		SHEET NO.
14CPT.14.02.10871.1		5
STATE PROJECT	F.A. PROJECT NO.	DESCRIPTION
14CPT.14.02.10871.1		

### TYPICAL 3



### TYPICAL 4



### SURFACING SCHEDULE

ITEM NO	DESCRIPTION
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD
D1	PROP. APPROX. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.OB, AT A AVERAGE RATE OF 342 LBS PER SQ. YD.
R	MILLED RUMBLE STRIPS
U	EXISTING ASPHALT
V1	MILLED ASPHALT PAVEMENT 1 1/2 " IN DEPTH AT LOCATIONS AS DIRECTED BY PROJECT ENGINEER
V2	MILLED ASPHALT PAVEMENT 3" IN DEPTH AT LOCATIONS AS DIRECTED BY PROJECT ENGINEER



PROJECT NO.	SHEET NO.	TOTAL NO.
2016CPT.14.02.10871.1	7	

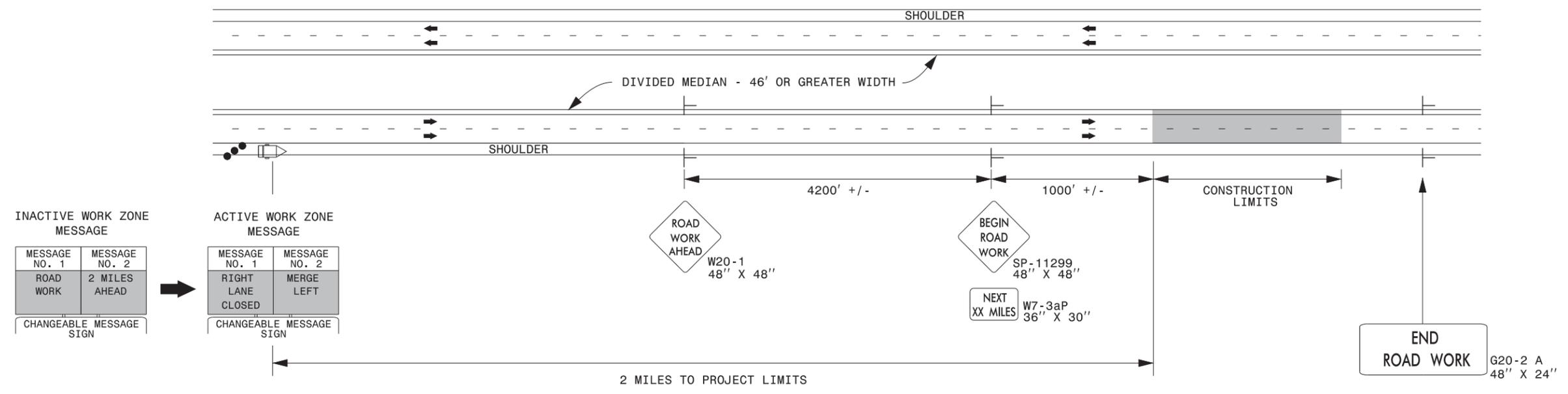
### SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	3" MILLING SY	1½" MILLING SY	INCIDENTAL MILLING SY	INTERMEDIATE COURSE, I19.08 TONS	SURFACE COURSE, S9.5B TONS	ASPHALT BINDER FOR PLANT MIX TONS	MILLED RUMBLE STRIPS (ASPHALT CEMENT CONCRETE) LF	ADJ. OF DROP INLET EA	
2016CPT.14.02.10871.1	Swain	1	US 19/74 WEST	FROM BRIDGE #10 TO END DIV HWY	1	2	MD	NO	NO	2.57	28	27,138	4,156	100	5,105	4,208	497	27,139		
<b>TOTAL FOR MAP NO. 1</b>										<b>2.57</b>		<b>27,138</b>	<b>4,156</b>	<b>100</b>	<b>5,105</b>	<b>4,208</b>	<b>497</b>	<b>27,139</b>		
2016CPT.14.02.10871.1	Swain	2	US 19/74 EAST	FROM BRIDGE #10 TO END DIV HWY	1	2	MD	NO	NO	2.57	28	27,138	3,620	100	5,105	4,156	494	27,139		
<b>TOTAL FOR MAP NO. 2</b>										<b>2.57</b>		<b>27,138</b>	<b>3,620</b>	<b>100</b>	<b>5,105</b>	<b>4,156</b>	<b>494</b>	<b>27,139</b>		
2016CPT.14.02.10871.1	Swain	3	US 19/74	FROM BEGIN DIV HWY TO PVT CHG .01 MILES WEST OF SR-1123	2	5	MU	NO	NO	0.6	75	10,138	850	500	1,906	2,774	166		11	
<b>TOTAL FOR MAP NO. 3</b>										<b>0.6</b>		<b>10,138</b>	<b>850</b>	<b>500</b>	<b>1,906</b>	<b>2,774</b>	<b>166</b>		<b>11</b>	
2016CPT.14.02.10871.1	Swain	4	RAMP (EXIT 64)	FROM US 19/74 EAST TO US 19	3	1		NO	NO	0.37	24		5,210			484	29			
<b>TOTAL FOR MAP NO. 4</b>										<b>0.37</b>			<b>5,210</b>			<b>484</b>	<b>29</b>			
2016CPT.14.02.10871.1	Swain	5	ACCESS RAMP WEST	FROM US 19 TO US 19/74 WEST	4	1		NO	NO	0.43	24		6,054			552	33			
<b>TOTAL FOR MAP NO. 5</b>										<b>0.43</b>			<b>6,054</b>			<b>552</b>	<b>33</b>			
2016CPT.14.02.10871.1	Swain	6	ACCESS RAMP EAST	FROM US 19 TO US 74 EAST	4	1		NO	NO	0.27	24		3,802			347	21			
<b>TOTAL FOR MAP NO. 6</b>										<b>0.27</b>			<b>3,802</b>			<b>347</b>	<b>21</b>			
<b>TOTAL FOR PROJ NO. 2016CPT.14.02.10871.1</b>										<b>6.81</b>			<b>64,414</b>	<b>23,692</b>	<b>700</b>	<b>12,116</b>	<b>12,521</b>	<b>1,240</b>	<b>54,278</b>	<b>11</b>
<b>GRAND TOTAL</b>										<b>6.81</b>			<b>64,414</b>	<b>23,692</b>	<b>700</b>	<b>12,116</b>	<b>12,521</b>	<b>1,240</b>	<b>54,278</b>	<b>11</b>

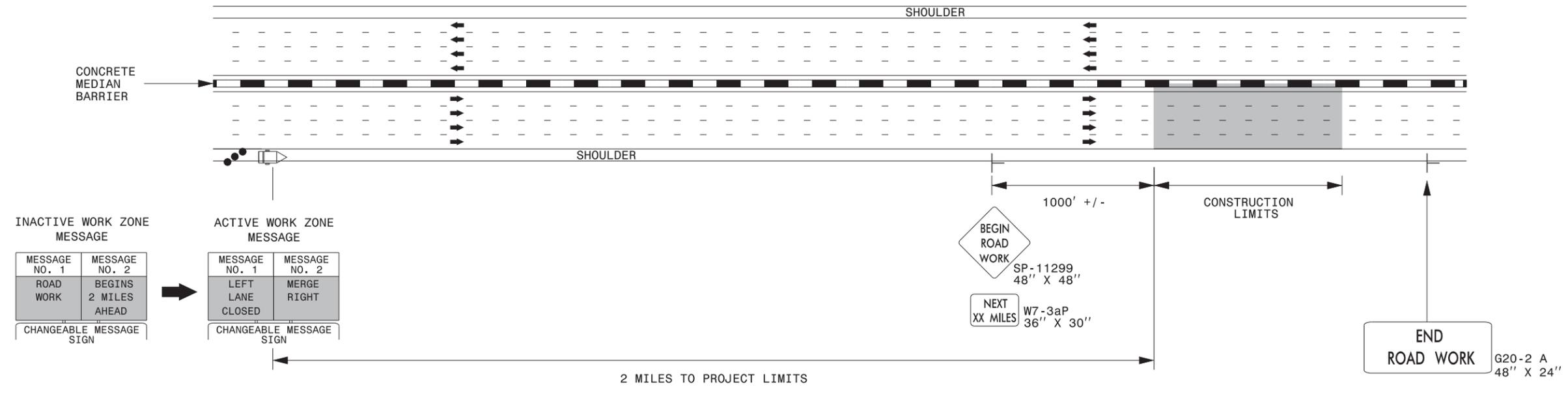
### THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP	LANES	LANE TYPE	LENGTH	WIDTH	4400000000-E	4457000000-N	4697000000-E	4710000000-E	4721000000-E	4725000000-E	4810000000-E	4891000000-E	4905000000-N			
										WORK ZONE ADVANCE/GENERAL WAVING SIGNING SF	TEMPORARY TRAFFIC CONTROL LS	8" X 120 M WHITE THERMO LF	24" X 120 M WHITE THERMO LF	THERMO MSG SCHOOL 120 M EA	THERMO LT ARROW 90 M EA	THERMO RT ARROW 90 M EA	4" WHITE PAINT LF	4" X 50 M YELLOW THERMO LF	4" X 50 M WHITE THERMO LF	SNOW PLOWABLE MARKERS EA	
2016CPT.14.02.10871.1	Swain	1	US 19/74 WEST	FROM PVT CHG UNDER SR-1140 TO END DIV HWY	1	2	MD	2.57	28	292.0	1	1,028	250	6	13	6	6,785	14,084	20,568	245	
<b>TOTAL FOR MAP NO. 1</b>										<b>292.0</b>	<b>1</b>	<b>1,028</b>	<b>250</b>	<b>6</b>	<b>13</b>	<b>6</b>	<b>6,785</b>	<b>14,084</b>	<b>20,568</b>	<b>245</b>	
2016CPT.14.02.10871.1	Swain	2	US 1974 EAST	FROM BEG DIV HWY TO PVT CHG UNDER SR-1140	1	2	MD	2.57	28	292.0		1,028	250	6	15	2	6,785	14,084	20,568	245	
<b>TOTAL FOR MAP NO. 2</b>										<b>292.0</b>		<b>1,028</b>	<b>250</b>	<b>6</b>	<b>15</b>	<b>2</b>	<b>6,785</b>	<b>14,084</b>	<b>20,568</b>	<b>245</b>	
2016CPT.14.02.10871.1	Swain	3	US 19/74	FROM BEGIN DIV HWY TO PVT CHG .01 MILES WEST OF SR-1123	2	5	MU	0.6	75	67.0			80		2		3,168	7,920	8,160	94	
<b>TOTAL FOR MAP NO. 3</b>										<b>67.0</b>			<b>80</b>		<b>2</b>		<b>3,168</b>	<b>7,920</b>	<b>8,160</b>	<b>94</b>	
2016CPT.14.02.10871.1	Swain	4	EXIT 64 RAMP	FROM US 19/74 EAST TO US 19	3	1		0.37	24									1,953	1,953		
<b>TOTAL FOR MAP NO. 4</b>										<b>0.37</b>									<b>1,953</b>	<b>1,953</b>	
2016CPT.14.02.10871.1	Swain	5	ACCESS RAMP WEST	FROM US 19 TO US 19/74 WEST	4	1		0.43	24	24.0								2,270	2,270	40	
<b>TOTAL FOR MAP NO. 5</b>										<b>24.0</b>									<b>2,270</b>	<b>2,270</b>	<b>40</b>
2016CPT.14.02.10871.1	Swain	6	ACCESS RAMP EAST	FROM US 19 TO US 74 EAST	4	1		0.27	24	24.0								1,425	1,425	40	
<b>TOTAL FOR MAP NO. 6</b>										<b>24</b>									<b>1,425</b>	<b>1,425</b>	<b>40</b>
<b>TOTAL FOR PROJ NO. 2016CPT.14.02.10871.1</b>										<b>699</b>	<b>1</b>	<b>2,056</b>	<b>580</b>	<b>12</b>	<b>38</b>	<b>8</b>	<b>16,738</b>	<b>41,736</b>	<b>54,944</b>	<b>664</b>	
<b>GRAND TOTAL</b>										<b>699</b>	<b>1</b>	<b>2,056</b>	<b>580</b>	<b>12</b>	<b>38</b>	<b>8</b>	<b>16,738</b>	<b>41,736</b>	<b>54,944</b>	<b>664</b>	

## DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



## DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER



**NOTES:**

- 1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6' AS MEASURED FROM THE EDGE OF PAVEMENT.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) FOR MEDIAN WIDTHS LESS THAN 46' (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
- 4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 5) INSTALL "ROAD WORK AHEAD" (W20-1) ALONG ENTRANCE RAMP 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMP WITHIN THE WORK ZONE.
- 6) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER AND WITH DIVIDED MEDIANS OF 46' OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

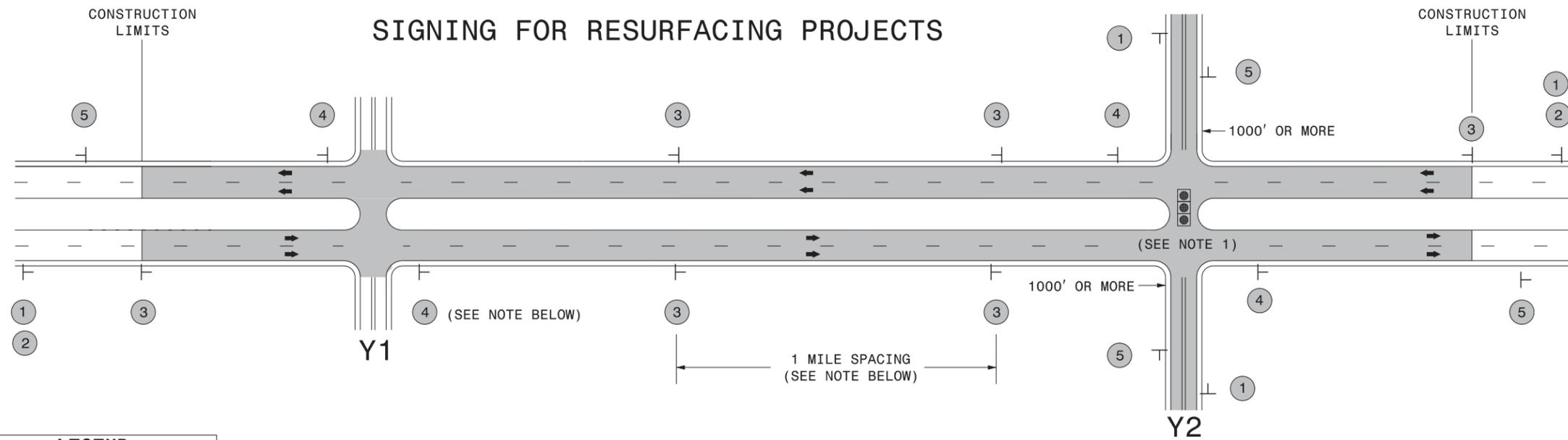
**LEGEND**

- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM



**RESURFACING ADVANCE  
WARNING SIGNS FOR  
HIGH SPEED FACILITIES  
≥ 60 MPH**

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LEGEND	
┆	STATIONARY SIGN
←	DIRECTION OF TRAFFIC FLOW

### MAINLINE (-L-) SIGNING

### -Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 W20-1 48" X 48"	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> <li>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE</li> <li>2) SUBDIVISION ROADS</li> <li>3) DEAD END ROADS</li> </ol> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <div style="display: flex; justify-content: space-around;"> <div>             W20-1            48" X 48"         </div> <div>             W20-7 A            48" X 48"         </div> </div> <p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>
	2	 W7-3aP 24" X 18"	#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER. (NO FRACTIONAL OR DECIMAL NUMBERS)	
	3	 SP 13107 48" X 48"	PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER. IF NO -Y- LINES EXIST, PLACE 2ND SET 1/2 MILE FROM THE CONSTRUCTION LIMITS AND THEN SPACE 1 MILE THEREAFTER.	
	4	 SP 13106 48" X 48"	THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH. A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.	
5	 G20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS.		
			<p>NOTES:</p> <ol style="list-style-type: none"> <li>1) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.</li> </ol>	

**RESURFACING  
ADVANCE WARNING SIGNS  
FOR RURAL AND SUBURBAN  
MULTI-LANE ROADWAYS  
W/ SHOULDER SECTIONS**